

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	2	(partially adj removed and gate adj structure and partially adj etched adj gate).clm.	US-PGPU B; USPAT; EPO; JPO	OR	ON	2006/10/24 07:39
L2	502	438/33, 68,113-114,458, 460-465.ccls.	US-PGPU B; USPAT; EPO; JPO	OR	ON	2006/10/24 07:41
L3	5088	438/33,68,113-114,458, 460-465.ccls.	US-PGPU B; USPAT; EPO; JPO	OR	ON	2006/10/24 07:41
L4	758	3 and (dice dicing separation separat\$3 cutting cut\$2 dividing divid\$3 singularity individual single) with (polish\$3 grind\$3)	US-PGPU B; USPAT; EPO; JPO	OR	ON	2006/10/24 07:42
L5	315	4 and (dice dicing separation separat\$3 cutting cut\$2 dividing divid\$3 singularity individual single) with (laser irradiat\$3)	US-PGPU B; USPAT; EPO; JPO	OR	ON	2006/10/24 07:47

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Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L2	502	438/33, 68,113-114,458, 460-465.ccls.	US-PGPU B; USPAT; EPO; JPO	OR	ON	2006/10/24 07:41
L3	5088	438/33,68,113-114,458, 460-465.ccls.	US-PGPU B; USPAT; EPO; JPO	OR	ON	2006/10/24 07:41
L4	758	3 and (dice dicing separation separat\$3 cutting cut\$2 dividing divid\$3 singularity individual single) with (polish\$3 grind\$3)	US-PGPU B; USPAT; EPO; JPO	OR	ON	2006/10/24 07:42
L5	315	4 and (dice dicing separation separat\$3 cutting cut\$2 dividing divid\$3 singularity individual single) with (laser irradiat\$3)	US-PGPU B; USPAT; EPO; JPO	OR	ON	2006/10/24 07:47
S5	129251	semiconductor and ((dice dicing separation separat\$3 cutting cut\$2 dividing divid\$3 singularity individual single) near5 (wafer substrate workpiece))	US-PGPU B; USPAT; EPO; JPO	OR	ON	2006/07/12 18:25
S14	24785	S5 and ((dice dicing separation separat\$3 cutting cut\$2 dividing divid\$3 singularity single) near5 (line groove alignment adj mark))	US-PGPU B; USPAT; EPO; JPO	OR	ON	2005/11/17 15:06
S15	1142	S14 and ((dice dicing separation separat\$3 cutting cut\$2 dividing divid\$3 singularity singleline groove alignment adj mark) near5, (polish\$3 blast\$5))	US-PGPU B; USPAT; EPO; JPO	OR	ON	2005/07/07 08:42
S16	1530	S14 and ((dice dicing separation separat\$3 cutting cut\$2 dividing divid\$3 singularity single line groove alignment adj mark) near5 (polish\$3 blast\$5))	US-PGPU B; USPAT; EPO; JPO	OR	ON	2005/07/07 08:41

## EAST Search History

S17	67	S16 and ((dice dicing separation separat\$3 cutting cut\$2 dividing divid\$3 singularity singleline groove alignment adj mark) near5 (laser near5 beam))	US-PGPU B; USPAT; EPO; JPO	OR	ON	2005/07/07 13:49
S18	22	(gate near5 silicide) with (silicide near5 protect\$3 near3 mask)	US-PGPU B; USPAT; EPO; JPO	OR	ON	2005/07/07 14:05
S19	1	10/456985	US-PGPU B; USPAT; EPO; JPO	OR	ON	2005/07/07 13:55
S20	1	10/758289	US-PGPU B; USPAT; EPO; JPO	OR	ON	2005/07/07 13:56
S21	2	(gate near5 silicide) with (silicide near5 protect\$3 near3 mask) with simultaneously	US-PGPU B; USPAT; EPO; JPO	OR	ON	2005/07/07 14:25
S22	275	(gate near5 silicide) with simultaneously	US-PGPU B; USPAT; EPO; JPO	OR	ON	2005/07/07 14:04
S23	2	S22 and simultaneously with (silicide near5 protect\$3 near3 mask)	US-PGPU B; USPAT; EPO; JPO	OR	ON	2005/07/07 14:05
S24	5	S22 and (silicide near5 protect\$3 near3 mask)	US-PGPU B; USPAT; EPO; JPO	OR	ON	2005/07/07 14:11
S25	22	S22 and (silicid\$6 near5 protect\$3 near3 (mask\$3 layer))	US-PGPU B; USPAT; EPO; JPO	OR	ON	2005/07/07 14:18
S26	5	S22 and (silicid\$6 near5 protect\$3 near3 (mask\$3 layer)) with simultaneously	US-PGPU B; USPAT; EPO; JPO	OR	ON	2005/07/07 14:22
S27	5	(gate near5 silicide) with (silicide near5 protect\$3 near3 (mask\$3 layer)) with simultaneously	US-PGPU B; USPAT; EPO; JPO	OR	ON	2005/07/07 14:35
S28	0	(image near3 sensor) with (implantation implanting implant\$3)	US-PGPU B; USPAT; EPO; JPO	OR	ON	2005/07/07 14:36

## EAST Search History

S29	0	(image near3 sesor) with (implantation implating implant\$3)	US-PGPU B; USPAT; EPO; JPO	OR	ON	2005/07/07 14:36
S30	260	(image near3 sensor) with (implantation implating implant\$3)	US-PGPU B; USPAT; EPO; JPO	OR	ON	2005/07/07 14:36
S31	143	S30 and (resist photoresist mask\$4) with (implantation implating implant\$3)	US-PGPU B; USPAT; EPO; JPO	OR	ON	2005/07/07 14:42
S32	40	S31 and (resist photoresist mask\$4) with (thick thickness)	US-PGPU B; USPAT; EPO; JPO	OR	ON	2005/07/07 14:43
S33	40	S32 and (resist photoresist mask\$4 thick thickness)	US-PGPU B; USPAT; EPO; JPO	OR	ON	2005/07/07 14:43
S34	32	S33 and (resist photoresist mask\$4 thick thickness) near5 first	US-PGPU B; USPAT; EPO; JPO	OR	ON	2005/07/07 14:44
S35	28	S34 and (resist photoresist mask\$4 thick thickness) near5 second	US-PGPU B; USPAT; EPO; JPO	OR	ON	2005/07/08 08:15
S36	1	10/745988	US-PGPU B; USPAT; EPO; JPO	OR	ON	2005/07/07 14:47
S37	0	10/816729	US-PGPU B; USPAT; EPO; JPO	OR	ON	2005/07/08 09:07
S38	1	10/816958	US-PGPU B; USPAT; EPO; JPO	OR	ON	2005/07/08 09:07
S39	266798	(dice dicing separation separat\$3 cutting cut\$2 dividing divid\$3 singularity individual single) near5 (wafer substrate workpiece)	US-PGPU B; USPAT; EPO; JPO	OR	ON	2005/11/10 12:53
S40	52647	S39 and (dice dicing separation separat\$3 cutting cut\$2 dividing divid\$3 singularity individual single) near5 (mark line groove void dicing near3 line)	US-PGPU B; USPAT; EPO; JPO	OR	ON	2005/11/10 15:31

## EAST Search History

S42	7133	S40 and (dice dicing separation separat\$3 cutting cut\$2 dividing divid\$3 singularity individual single mark line groove void dicing near3 line) near5 laser	US-PGPU B; USPAT; EPO; JPO	OR	ON	2005/11/10 12:57
S43	9928	S40 and (dice dicing separation separat\$3 cutting cut\$2 dividing divid\$3 singularity individual single mark line groove void dicing near3 line) near5 (laser beam)	US-PGPU B; USPAT; EPO; JPO	OR	ON	2005/11/10 12:49
S44	9300	S40 and (dice dicing separation separat\$3 cutting cut\$2 dividing divid\$3 singularity individual single mark line groove void dicing near3 line) near4 (laser beam)	US-PGPU B; USPAT; EPO; JPO	OR	ON	2005/11/10 12:49
S45	8342	S40 and (dice dicing separation separat\$3 cutting cut\$2 dividing divid\$3 singularity individual single mark line groove void dicing near3 line) near3 (laser beam)	US-PGPU B; USPAT; EPO; JPO	OR	ON	2005/11/10 12:49
S46	97293	(dice dicing separation separat\$3 cutting cut\$2 dividing divid\$3 singularity individual single) near5 (laser irradiat\$3)	US-PGPU B; USPAT; EPO; JPO	OR	ON	2005/11/10 12:50
S47	38078	(dice dicing separation separat\$3 cutting cut\$2 dividing divid\$3 singularity individual single) near (laser irradiat\$3)	US-PGPU B; USPAT; EPO; JPO	OR	ON	2005/11/10 12:51
S48	150634	(dice dicing separation separat\$3 cutting cut\$2 dividing divid\$3 singularity individual single) with (laser irradiat\$3)	US-PGPU B; USPAT; EPO; JPO	OR	ON	2006/10/24 07:47
S49	34413	(dice dicing separation separat\$3 cutting cut\$2 dividing divid\$3 singularity individual single) with (polish\$3)	US-PGPU B; USPAT; EPO; JPO	OR	ON	2005/11/10 12:59

## EAST Search History

S50	3193	(dice dicing separation separat\$3 cutting cut\$2 dividing divid\$3 singularity individual single) with (blasting)	US-PGPU B; USPAT; EPO; JPO	OR	ON	2005/11/10 12:52
S51	37455	S49 or S50	US-PGPU B; USPAT; EPO; JPO	OR	ON	2005/11/10 12:52
S52	4772	S48 and S51	US-PGPU B; USPAT; EPO; JPO	OR	ON	2005/11/10 12:53
S53	2541	S52 and (dice dicing separation separat\$3 cutting cut\$2 dividing divid\$3 singularity individual single) near5 (wafer substrate workpiece)	US-PGPU B; USPAT; EPO; JPO	OR	ON	2005/11/10 12:55
S54	1165	S53 and (dice dicing separation separat\$3 cutting cut\$2 dividing divid\$3 singularity individual single) near5 (die chip "IC")	US-PGPU B; USPAT; EPO; JPO	OR	ON	2005/11/10 12:56
S55	4170	(mark line groove void dicing near3 line) near5 (laser near5 irradiat\$3)	US-PGPU B; USPAT; EPO; JPO	OR	ON	2005/11/10 12:58
S56	87	S55 and (dice dicing separation separat\$3 cutting cut\$2 dividing divid\$3 singularity individual single) with (polish\$3)	US-PGPU B; USPAT; EPO; JPO	OR	ON	2005/11/10 15:29
S57	1	10/601310	US-PGPU B; USPAT; EPO; JPO	OR	ON	2005/11/10 14:08
S58	151	S55 and (dice dicing separation separat\$3 cutting cut\$2 dividing divid\$3 singularity individual single) with (polish\$3 grind\$3)	US-PGPU B; USPAT; EPO; JPO	OR	ON	2006/10/24 07:42

## EAST Search History

S59	168	S39 and (dice dicing separation separat\$3 cutting cut\$2 dividing divid\$3 singularity individual single) near5 (mark line groove void dicing line perforat\$3) near5 (laser near3 irradiat\$3)	US-PGPU B; USPAT; EPO; JPO	OR	ON	2005/11/10 15:43
S60	37	S59 and (dice dicing separation separat\$3 cutting cut\$2 dividing divid\$3 singularity individual single) with (polish\$3 grind\$3)	US-PGPU B; USPAT; EPO; JPO	OR	ON	2005/11/17 15:41
S61	1	(separation adj groove near5 laser adj beam and polishing and individually adj dividing). clm.	US-PGPU B; USPAT; EPO; JPO	OR	ON	2005/11/10 15:55
S62	267261	((dice dicing separation separat\$3 cutting cut\$2 dividing divid\$3 singularity individual single) near5 (wafer substrate workpiece))	US-PGPU B; USPAT; EPO; JPO	OR	ON	2005/11/17 15:06
S63	179956	((dice dicing separation separat\$3 cutting cut\$2 dividing divid\$3 singularity individual single) near2 (wafer substrate workpiece))	US-PGPU B; USPAT; EPO; JPO	OR	ON	2005/11/17 15:06
S64	23815	S63 and ((dice dicing separation separat\$3 cutting cut\$2 dividing divid\$3 singularity single) near2 (line groove alignment adj mark))	US-PGPU B; USPAT; EPO; JPO	OR	ON	2005/11/17 15:07
S65	61	S64 and ((laser near3 beam near irradiat\$3) near2 (line groove alignment adj mark))	US-PGPU B; USPAT; EPO; JPO	OR	ON	2005/11/17 15:11
S66	12	S65 and ((laser near3 beam near irradiat\$3 line groove alignment adj mark) with (grind\$3 polish\$4 blast\$3))	US-PGPU B; USPAT; EPO; JPO	OR	ON	2005/11/17 15:11
S67	623	((laser near3 beam near irradiat\$3) near2 (line groove alignment adj mark))	US-PGPU B; USPAT; EPO; JPO	OR	ON	2005/11/17 15:11

## EAST Search History

S68	19	S67 and ((laser near3 beam near irradiat\$3 line groove alignment adj mark) with (grind\$3 polish\$4 blast\$3))	US-PGPU B; USPAT; EPO; JPO	OR	ON	2005/11/17 15:11
S69	267261	(dice dicing separation separat\$3 cutting cut\$2 dividing divid\$3 singularity individual single) near5 (wafer substrate workpiece)	US-PGPU B; USPAT; EPO; JPO	OR	ON	2005/11/17 15:41
S70	168	S69 and (dice dicing separation separat\$3 cutting cut\$2 dividing divid\$3 singularity individual single) near5 (mark line groove void dicing line perforat\$3) near5 (laser near3 irradiat\$3)	US-PGPU B; USPAT; EPO; JPO	OR	ON	2005/11/17 15:41
S71	37	S70 and (dice dicing separation separat\$3 cutting cut\$2 dividing divid\$3 singularity individual single) with (polish\$3 grind\$3)	US-PGPU B; USPAT; EPO; JPO	OR	ON	2005/11/17 15:43
S12 3	12	"6294439"	US-PGPU B; USPAT; EPO; JPO	OR	ON	2005/11/18 12:05
S12 4	1	10/839430	US-PGPU B; USPAT; EPO; JPO	OR	ON	2005/11/18 12:06
S12 5	3	"6653698"	US-PGPU B; USPAT; EPO; JPO	OR	ON	2005/11/18 12:07
S12 6	473	438/33, 68,113-114,458, 460-465.ccls.	US-PGPU B; USPAT; EPO; JPO	OR	ON	2006/10/24 07:41
S12 7	4916	438/33,68,113-114,458, 460-465.ccls.	US-PGPU B; USPAT; EPO; JPO	OR	ON	2006/10/24 07:41
S12 8	1563	S127 and laser	US-PGPU B; USPAT; EPO; JPO	OR	ON	2006/07/12 18:25



## EAST Search History

S12 9	1342	S128 and ((dice dicing separation separat\$3 cutting cut\$2 dividing divid\$3 singularity individual single) near5 (wafer substrate workpiece))	US-PGPU B; USPAT; EPO; JPO	OR	ON	2006/07/12 18:26
S13 0	1075	S129 and ((dice dicing separation separat\$3 cutting cut\$2 dividing divid\$3 singularity individual single wafer substrate workpiece) with laser)	US-PGPU B; USPAT; EPO; JPO	OR	ON	2006/07/12 18:27
S13 1	418	S129 and ((line groove ) with laser)	US-PGPU B; USPAT; EPO; JPO	OR	ON	2006/07/13 06:38
S13 2	1	10/601310	US-PGPU B; USPAT; EPO; JPO	OR	ON	2006/07/13 06:38
S13 3	1	"6558975".PN.	USPAT; USOCR	OR	OFF	2006/07/13 10:39
S13 4	1	"6500047".PN.	USPAT; USOCR	OR	OFF	2006/07/13 10:40
S13 5	1	"6293270".PN.	USPAT; USOCR	OR	OFF	2006/07/13 10:40
S13 6	1	"6083811".PN.	USPAT; USOCR	OR	OFF	2006/07/13 10:41
S13 7	1	"5888883".PN.	USPAT; USOCR	OR	OFF	2006/07/13 10:41
S13 8	1	"5369060".PN.	USPAT; USOCR	OR	OFF	2006/07/13 10:53
S13 9	1	"5219796".PN.	USPAT; USOCR	OR	OFF	2006/07/13 10:53
S14 0	1	10/630969	US-PGPU B; USPAT; USOCR; EPO; JPO; DERWEN T; IBM_TDB	OR	OFF	2006/07/13 18:25

### EAST Search History

S14 1	1	10/459699	US-PGPU B; USPAT; USOCR; EPO; JPO; DERWEN T; IBM_TDB	OR	OFF	2006/07/13 18:25
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